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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,801	01/31/2000	Gary T. Boyd	55241USA9A	9317

7590 03/08/2002

Attention William D Miller  
Office Of Intellectual Property Counsel  
3M Innovative Properties Company  
PO BOX 33427  
St. Paul, MN 55133-3427

EXAMINER

SHAHER, RICKY D

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 03/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/498,801

Applicant(s)

BOYD ET AL

Examiner

R.D. SMITH

Group Art Unit

2572

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 10/5/01
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-35 is/are pending in the application.
- Of the above claim(s) 10, 11 AND 17-35 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-9 AND 12-16 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 2/2/00 is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2, 3 AND 5
- ☒ Interview Summary, PTO-413, PAPER NO. 9
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. The restriction requirement mailed 8/27/01 is withdrawn based on an interview with Ms. Cassandra Spyrou, SPE and Mr. Iain A McIntyre, applicant's representative. The following restriction requirement is set forth.
2. Restriction to one of the following inventions is required under 37 USC121:
  - I. Claims 2-9 and 12-16 are, drawn to an illumination device having specifics of the reflective polarizing film, classified in class 359, subclass 487.
  - II. Claim 10 and 29-35, drawn to an illumination device having a controller, classified in class 362, subclass 19.
  - III. Claim 11, drawn to an illumination device having a clean-up polarizer, classified in class 359, subclass 483.
  - IV. Claims 17-26 and 28, drawn to an illumination device having a diffuser, classified in class 361, subclass 19.
  - V. Claim 27, drawn to an illumination device having a second light source, classified in class 362, subclass 19.
3. Claim 1 link(s) inventions I-IV and V. The restriction requirement among the linked inventions is subject to the nonallowance of the linking claim(s), claim 1. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s)

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is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

4. The inventions are distinct, each from the other because of the following reasons:

Inventions I-IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I through V have separate utility such as an illumination device in combination with the particulars of the other subcombinations as set forth above in the grouping of claims. See MPEP 806.05(d).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and the search required for one of the Groups I-V, respectively, is not required for any other of the remaining Groups I-V, respectively, restriction for examination purposes as indicated is proper.

6. During a telephone conversion between Cassandra Spyrou, SPE and Iain McIntyre, applicant's Representative on October 5, 2001, a provisional election was made with traverse to prosecute the invention of Group I, claims 2-9 and 12-16. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10, 11 and 17-35 are withdrawn from

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further consideration by the examiner, 37 CFR1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventionship must be amended in compliance with 37 CFR1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventionship must be accompanied by a petition under 37 CFR1.48(b) and by the fee required under 37 CFR1.17(I).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Handschy et al ('451).

Handschy et al discloses a display device comprising a first light source (34), a reflective image display (36), a reflective polarizing film (64) and a reflector (42). Note by example only Fig. 2B.

9. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Minoura et al ('636).

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Minoura et al discloses a display device comprising a first light source (2041), a reflective image display (2051R or 2051B), a reflective polarizing film (2046) and a reflector (2049 and/or 2050). Note by example only Fig. 20.

10. Claims 1 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Schehrer et al ('246).

Schehrer et al discloses a display device comprising a first light source (501 or 510), a reflective image display (504), a reflective polarizing film (505) and a reflector (502 or 512), note by example only figures 7 and 8.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Handschy et al ('451) in view of Handschy et al ('800).

Handschy et al ('451) discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizer being curved.

Handschy et al ('800) teaches it is known to provide a curved reflective polarizer in the same field or endeavor for the purpose of reducing the bulk and weight of a display system.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the reflective polarizer (polarizing beam

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splitting cube) of Handschy et al ('451) to include a curved reflective polarizer as taught by Handschy et al ('800) in order to reduce the bulk and weight of the display system.

12. Claims 2-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoura et al ('636) or Schehrer et al ('246).

Minoura et al and Schehrer et al each disclose all of the subject matter claimed, note the above explanation, except for the reflective polarizing film being curved.

It is well known to provide a curved reflective polarizer in the same field of endeavor or analogous art for the purpose of reducing the bulk and weight of a display system or alternating provide for light concentration, uniform light transmission and/or aberration corrections.

Therefore, it would have been obvious and/or within the level of one of ordinary skilled In the art at the time the invention was made to modify the polarizing beam splitter of Minoura et al or Schehrer et al to include a curved reflective polarizer as is common used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system.

13. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first portion of the reflective polarizing film being displaced from the light source along the first axis and the second portion of the reflective polarizing film being displaced from the first light source along the optical axis must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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14. Any inquiry concerning this communication should be directed to R. D. Shafer at telephone number (703) 308-4813.

Shafer/ds

02/03/02

*R. D. Shafer*  
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